3000 LMT

FRAME

TOOLKIT

LMT945I8

LMT94   62I

10'x 2" SUCTION HOSE

3-25' x 2" SUCTION HOSE

50'x 2"
DISCHARGE HOSE

PUMP DISCHARGE

WASTE

50'x 1-1/2" DISCHARGE HOSE

FRESH WATER HOSES

50' x 1-1/2" FIRE HOSE

2000 ml D.E. MEASURE CUP

CHLORINE MEASURE CUP

CHLORINE TEST KIT

STRAINER

BUCKET

LIFTING SLING

PUMP MODULE

PUMP MODULE

- FRESH OR SALT WATER APPLICATION
- BRONZE & STAINLESS STEEL
- CENTRIFUGAL
- SELF-PRIMING
- LIGHTWEIGHT
- AIR-COOLED
- SINGLE CYLINDER

- 4 CYCLE OVERHEAD VAVLE WITH DIRECT FUEL INJECTION RATED AT 160 GPM
- 5.8 HORSEPOWER
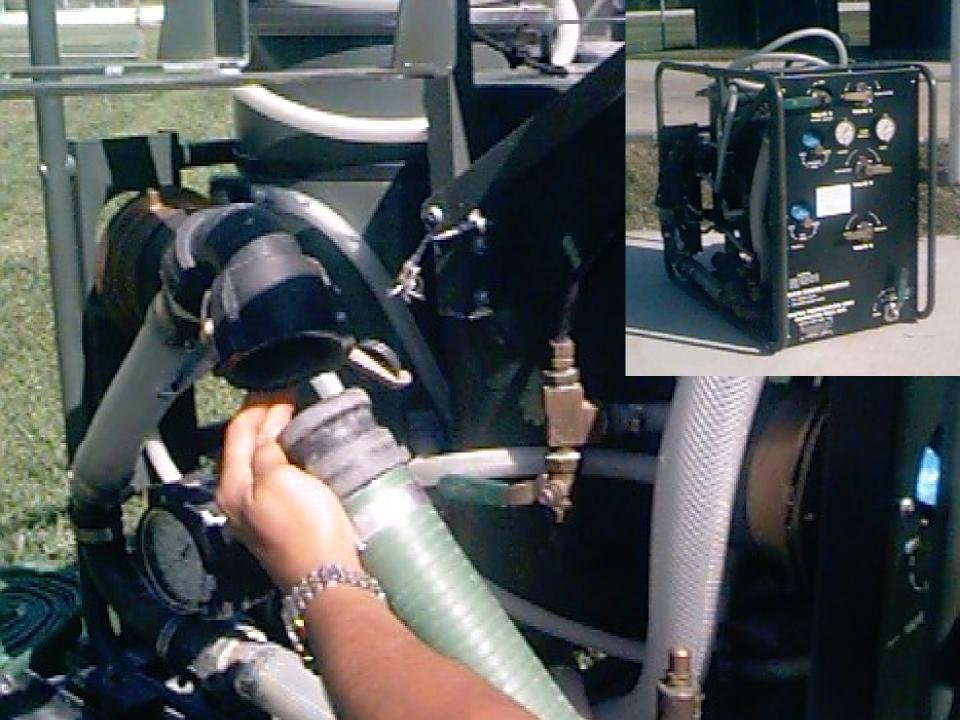- 1 GAL DIESEL FUEL TANK (0.4 GPH)
- 1 QT (15-W-40) OIL CRANKCASE

CONTROL MODULE

D.E. SLURRY TANK

GAUGES , OPERATING VALVES & CHEMICAL FEEDERS

POLY
FEED

SCALE FROM 0-10 WITH
OPTIMUM SETTING OF 5

FILTER MODULE

SITE SELECTION

- FIRM LEVEL GROUND
- UPSTREAM FROM WATER SOURCE
- COVER AND CONCEALMENT
- ROADNETS
- GOOD DRAINAGE AREA

PUMP PLACEMENT

WITHIN 25 FEET OF WATER SOURCE AND NO MORE THAN 20 FEET ABOVE THE WATER SOURCE

POLY
FEED

POLY
FEED

185 ml OR 6.3 fl oz.
WITH 5 GALLONS
OF WATER

VALVE "START UP" POSITION

W-O-F-F-C-C

VALVE 1-WASTE

VALVE 2-ON

VALVE 3-FILTER

VAVLE 4-FILTER

VALVE 5-CLOSE

VALVE 6-CLOSE

WASTE

CLEAN WATER

VALVE 1

2
TLET

FILTER
PRESSURE

MORE
10

OFF

ON

VALVE 2

FILTER PRESSURE

OUTLET

INLET

BACKWASH
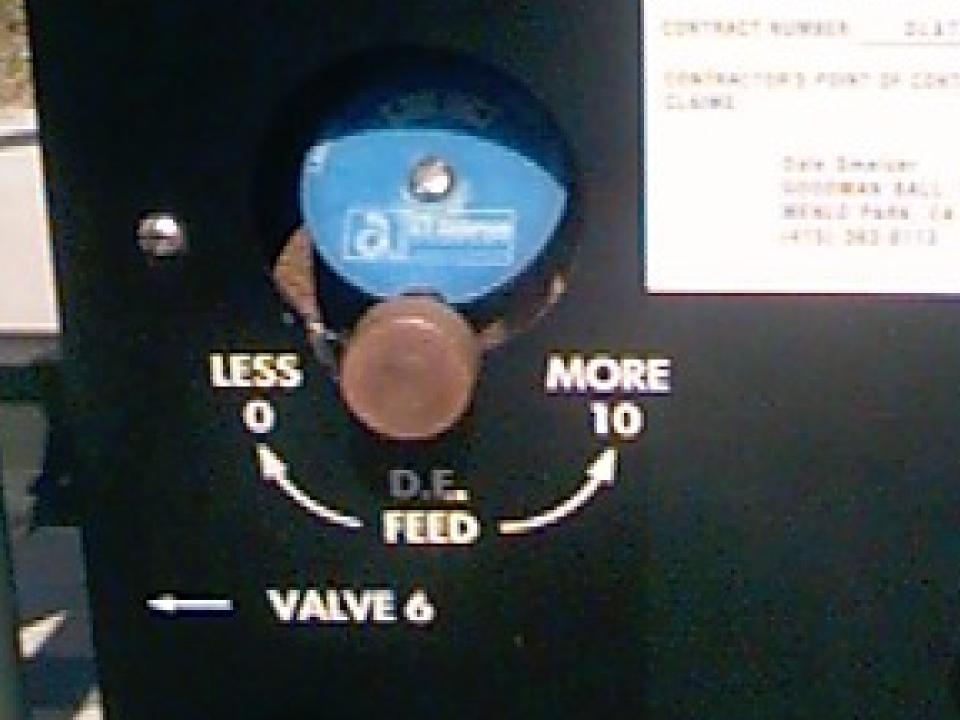
FILTER

VALVE 3

RUN   PRECOAT

VALVE 4

PRECOAT

VALVE 4

OPERATION

VALVE

PURIFICATION UNIT

BALL INC.

PARK CALIF. USA

CONTROL UNIT

OPEN

10,000 ml D.E.

1 lb. DRY CHLORINE WITH 3 GALLONS OF WATER

MAY ALSO PRIME PUMP THROUGH HOSE

1 QT 15-W-40

QUESTIONS?

10 MINUNTE BREAK

9 MIN

66

8 MIN

67

7 MIN

6 MIN

5 MIN

70

4 MIN

71

3 MIN

2 MIN

1 MIN

STAND-BY

VENT

D.E.
TANK

8 MINUTES FOR PRECOAT
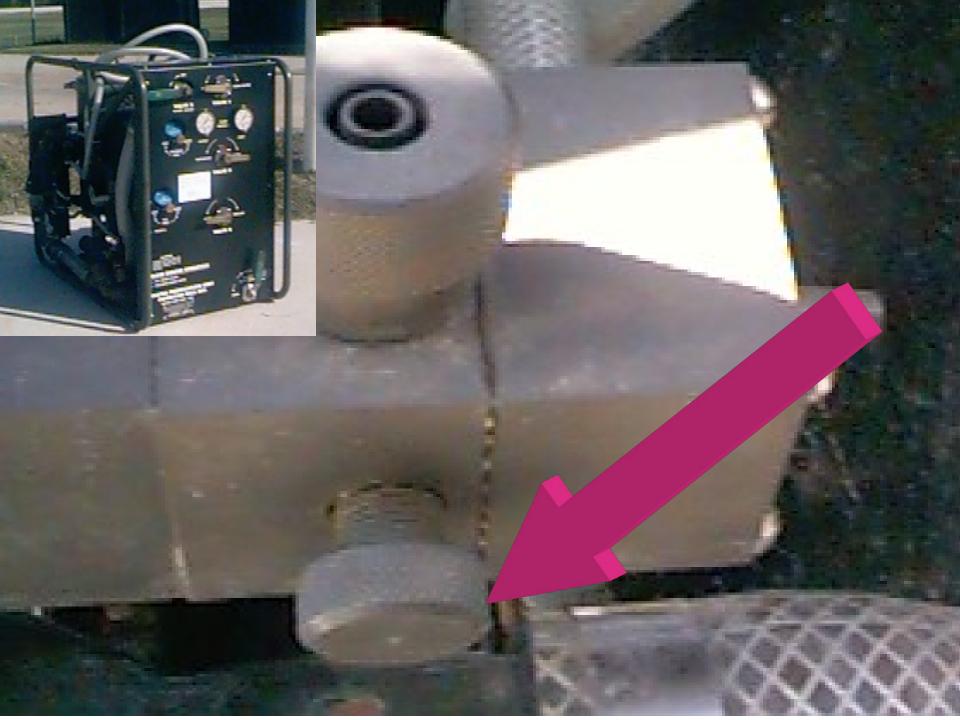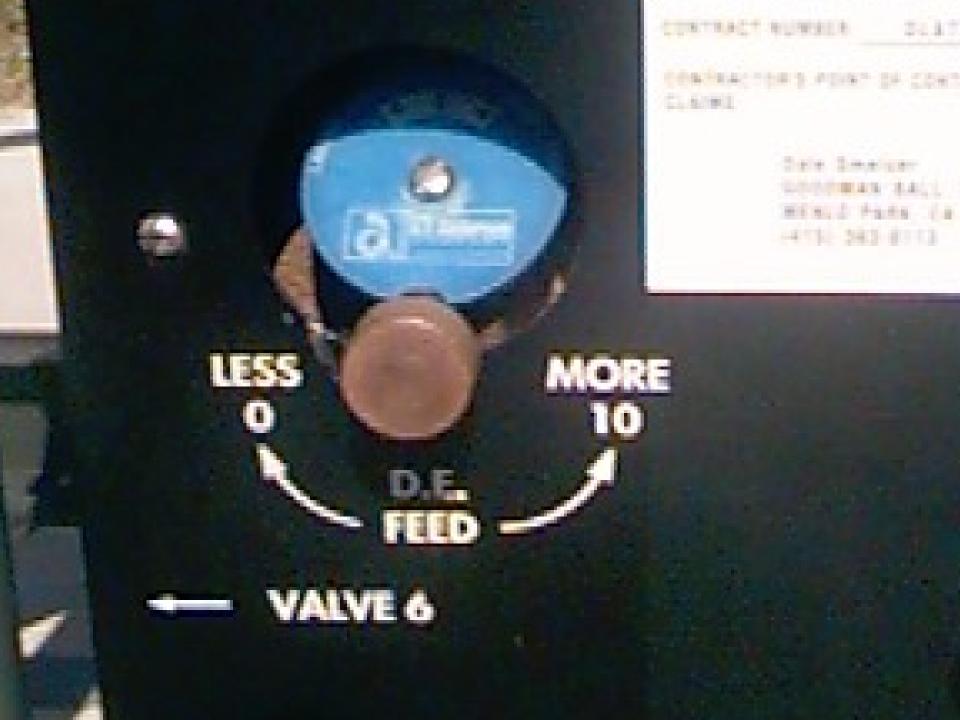
LESS
0

MORE
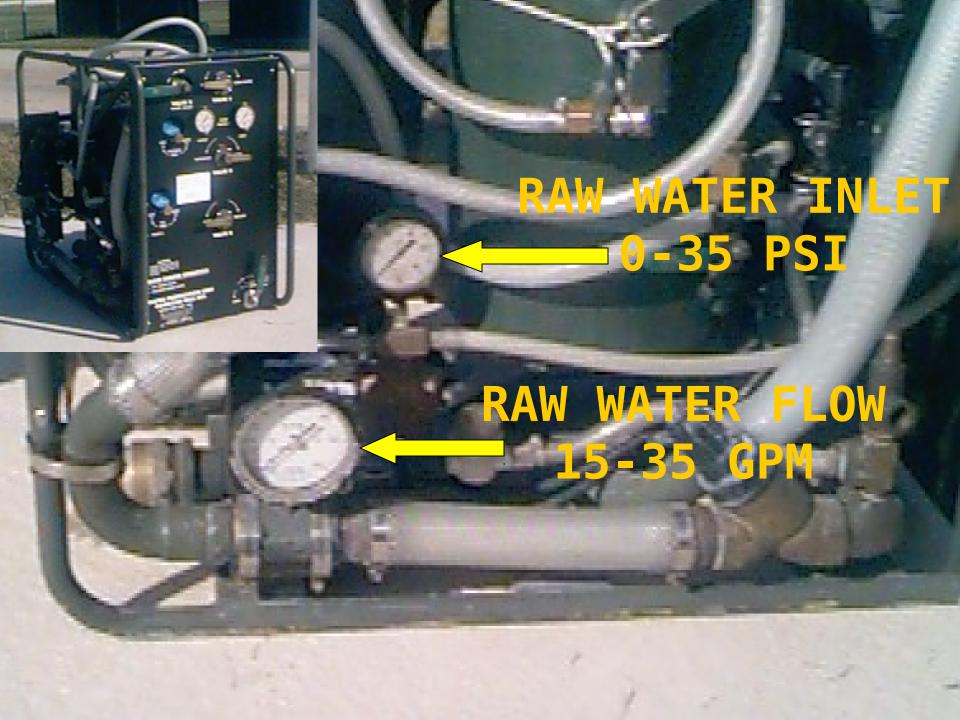10

D.E.
FEED

⟵ VALVE 6

FILTER

PREDOAT
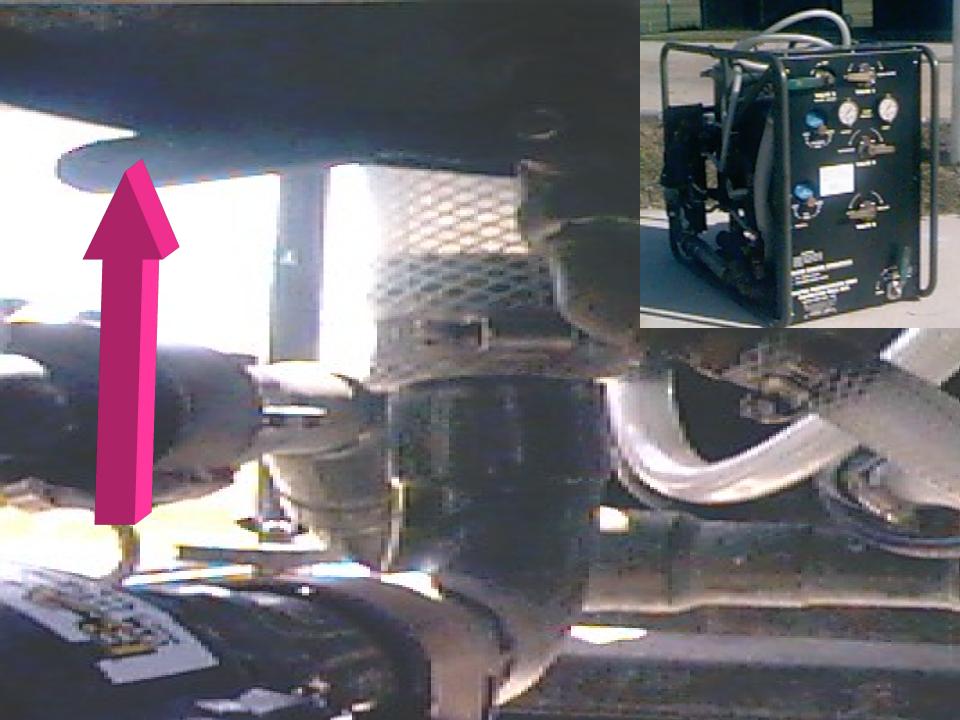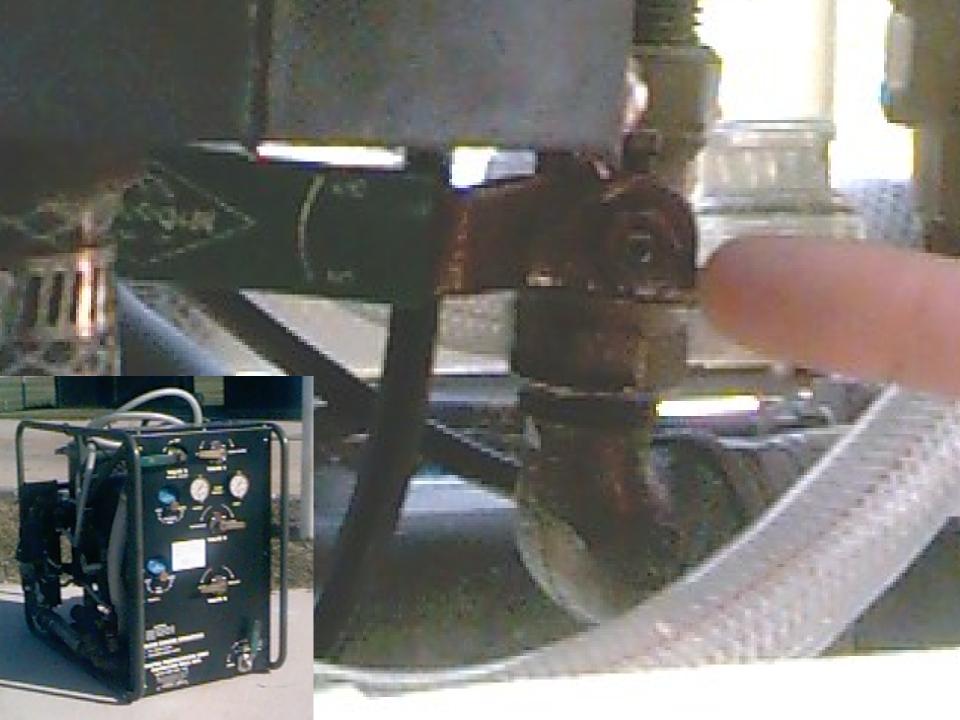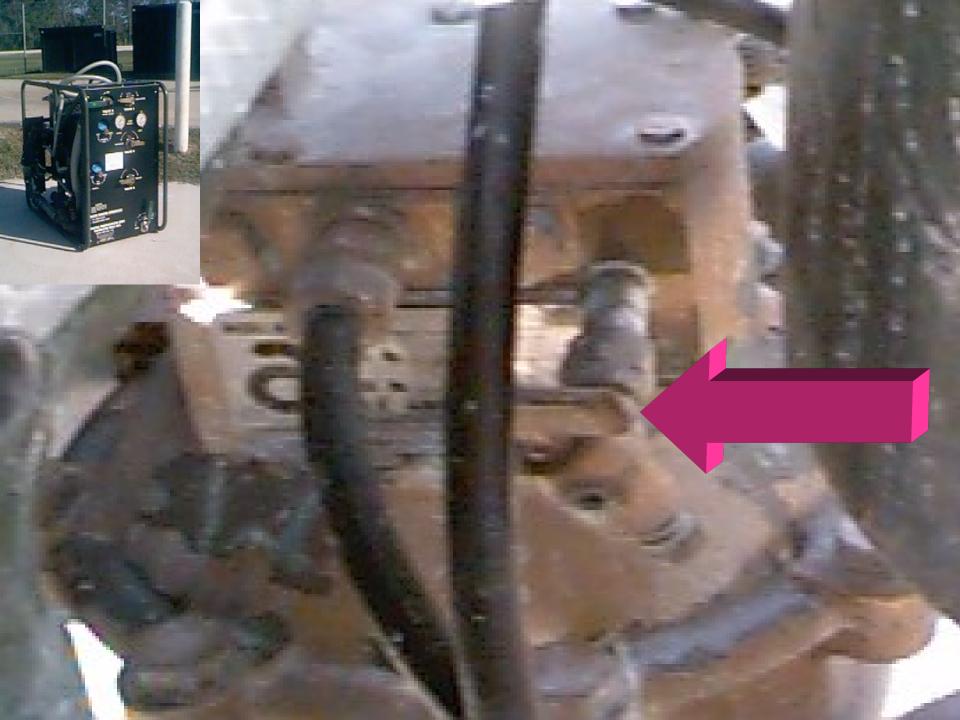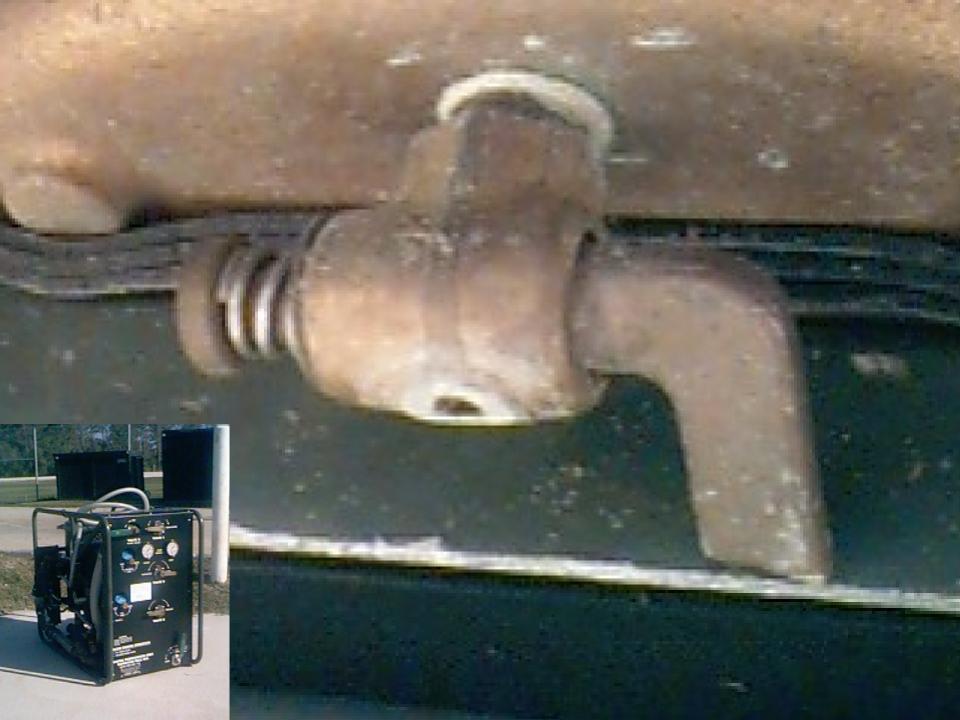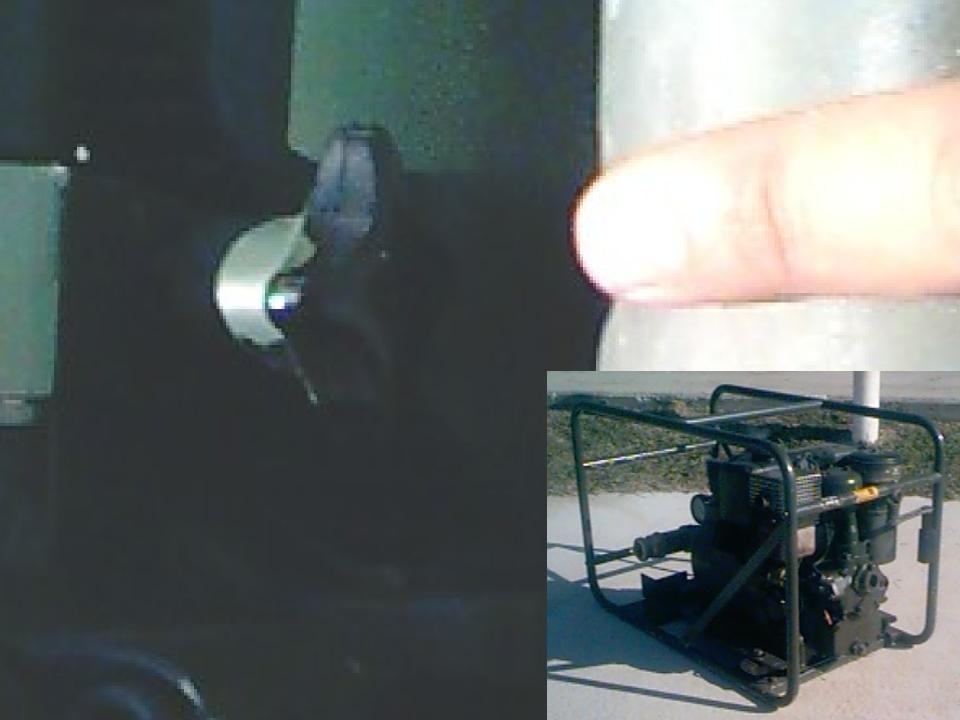
VALVE 4

TAKE CHLORINE SAMPLES FROM THE PRODUCT TANK AND MAKE ADJUSTMENTS WITH THE CHLORINE FEEDER CONTROL KNOB

30 MINUTE INTERVALS MONITOR THE FOLLOWING:

CHLORINE LEVEL 1.0-2.0
D.E. SLURRY MIXTURE
POLYMER TANK LEVEL
CHLORINE TANK LEVEL
FUEL
GUAGES
RAW WATER SOURCE

FILTER OUTLET 0-18 PSI

FILTER INLET 0-40 PSI

RAW WATER INLET
0-35 PSI

RAW WATER FLOW
15-35 GPM

RAW WATER
PUMP SUCTION
15 VAC-
15 PSI

BACKWASHING

BACKWASH IN THE FOLLOWING EVENTS:

FILTER DIFFERENTIAL EXCEEDS 25 PSI

UNIT WILL BE SHUTDOWN

DRAIN D.E. TANK

VENT

D.E. TANK

CAUTION

WEAR DUST MASK

SET D.E. FEEDER TO 10

LESS
0

MORE
10

D.E.
FEED

VALVE 6

OPEN D.E. BLEEDER

ONCE D.E. TANK IS CLEAN CLOSE:

DRAIN VALVE
D.E. INJECTOR
ALL FEEDERS TO "0"

BACKWASH "A" VALVE SETTINGS

W	**WASTE**	**VALVE**
1		
0	**OFF**	**VALVE**
2		
0	**OPEN**	**VALVE**
5		

WASTE

CLEAN WATER

VALVE 1

2
TLET

OFF

ON

VALVE 2

OUTLET

INLET

BACKWASH

FILTER

VALVE 3
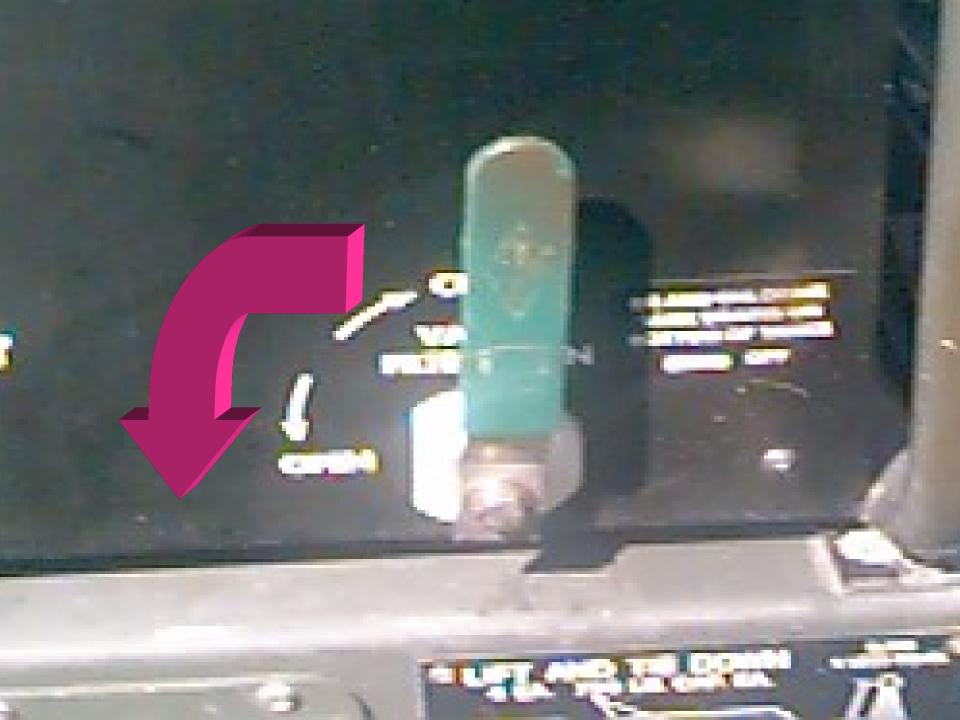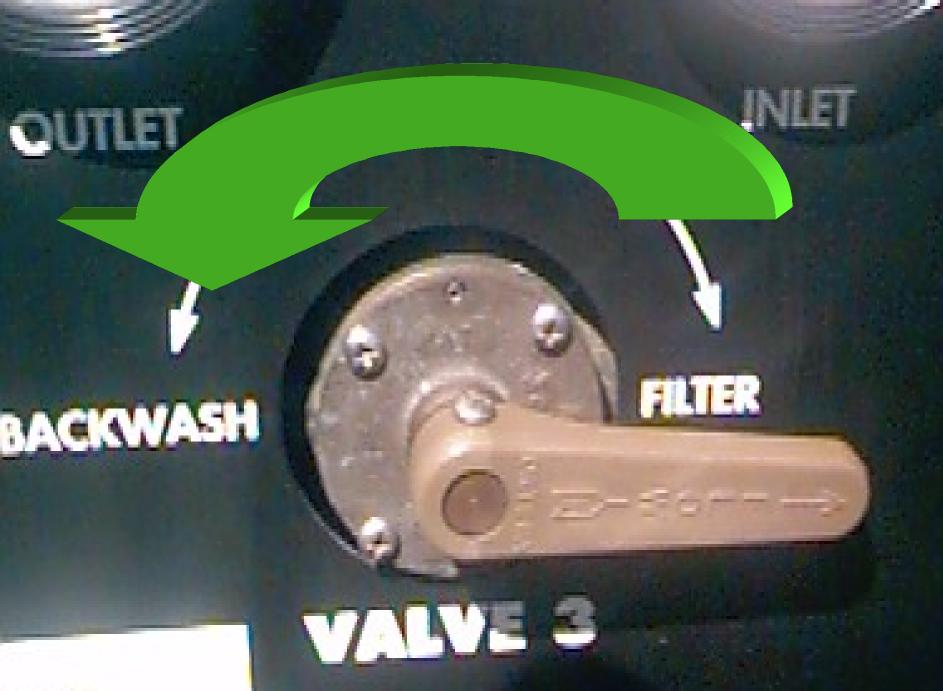
BACKWASH "B" VALVE SETTINGS

W WASTE VALVE 1

O OFF VALVE 2

O OPEN VALVE 5

F FILTER VALVE 3

OUTLET

INLET

BACKWASH

FILTER

VALVE 3

BACKWASH PROCEDURES

- <u>BACKWASH "A" — 1 MIN</u>

- <u>BACKWASH "B" — 15 SEC</u>

- <u>REPEAT STEPS 3 MORE TIMES</u>

PERFORM SHORT SHUTDOWN

PERFORM START UP PROCEDURES

QUESTIONS?

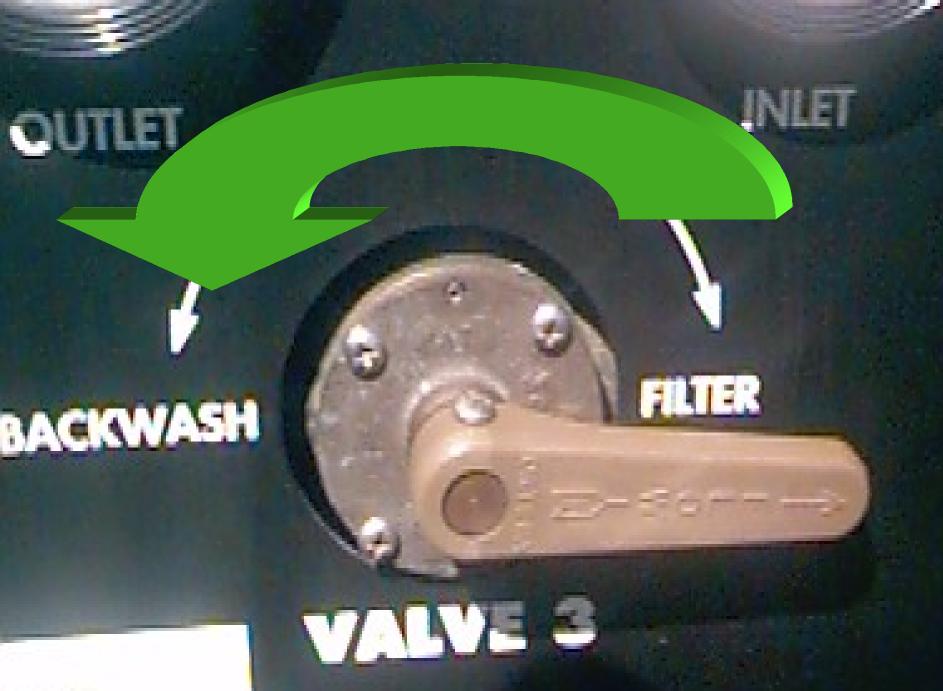# 10 MINUNTE BREAK

9 MIN

8 MIN

7 MIN

6 MIN

117

5 MIN

4 MIN

3 MIN

2 MIN

1 MIN

STAND-BY

123

SHORT SHUTDOWN

SHUTDOWN IN THE FOLLOWING EVENT:

-RAW WATER LEVEL IS LOW

-PRODUCT TANK IS FULL

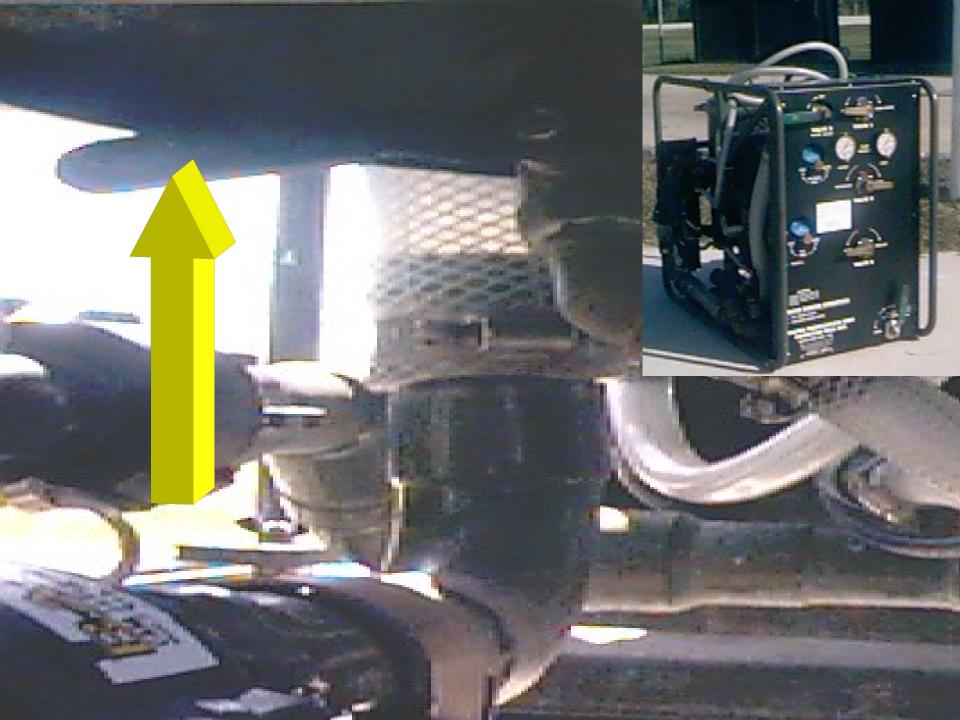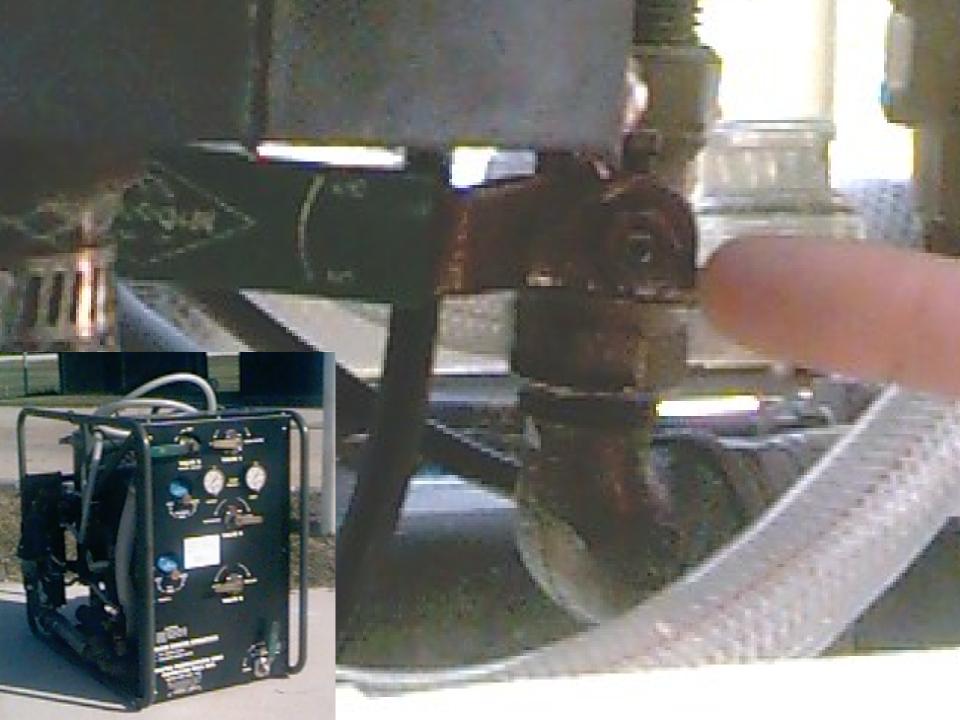-INTERRUPTION IN OPERATION CYCLE

-UNIT WILL NOT BE OPERATED
   FOR 8 HRS

OUTLET

INLET

BACKWASH

FILTER

VALVE 3

PRECOAT

VALVE 4

...NG OPERATION

...VE
...SH VALVE

...URIFICATION UNIT
...MAN BALL INC.
...D PARK CALIF. USA
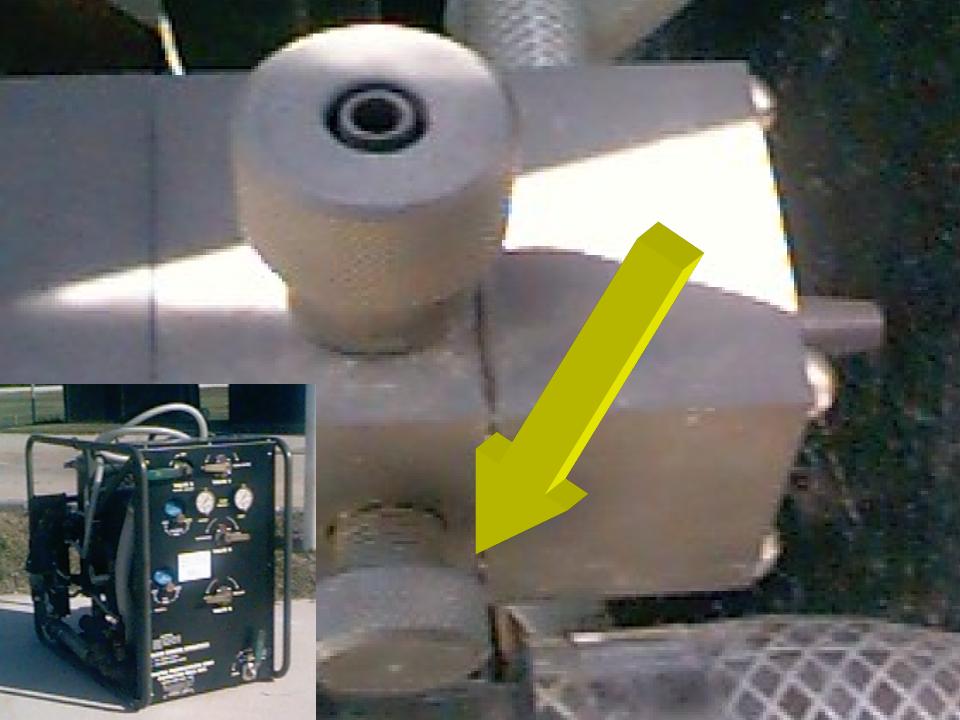
...CONTROL UNIT

OPEN

LIFT AND TIE DOWN

LONG SHUTDOWN

LONG SHUTDOWN

- SECURE SYSTEM FOR MORE THAN 8 HRS
- PRIOR TO TERMINATION OF FIELD EXERCISE
- FOR EXTENDED STORAGE OR TRANSPORTATION

3-5 MIN. IN "START-UP"

BACKWASH

SHUTDOWN THE PUMP

OPEN FILTER HOUSING WASHDOWN

ATTACH THE PLUGS ONTO THE UPPER FILTER HOSE ON THE CONTROL MODULE
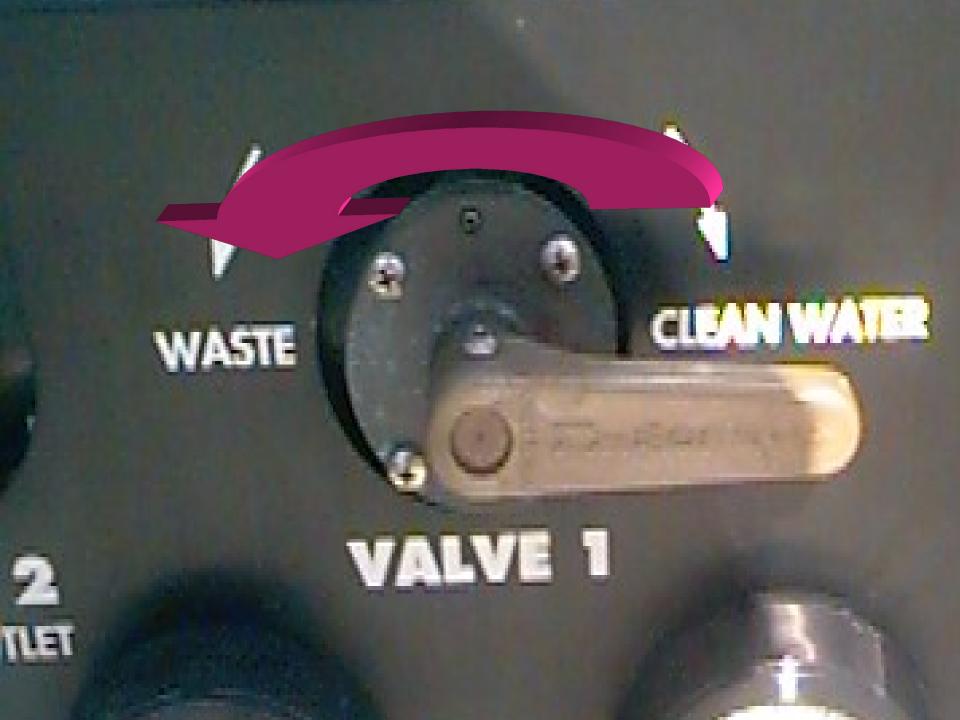
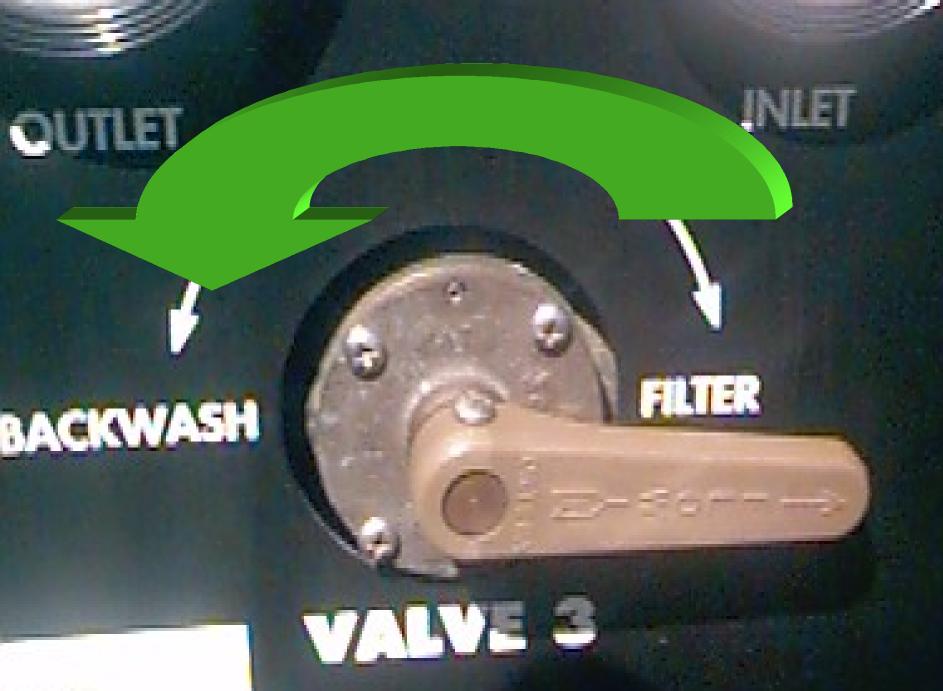# OPEN FILTER VALVE POSITIONS

VALVE 1-WASTE
VALVE 2-ON
VALVE 3-BACKWASH
VALVE 4-FILTER
VALVE 5-CLOSED
VALVE 6-CLOSED

WASTE

CLEAN WATER

VALVE 1

2
TLET

OFF

ON

VALVE 2

RUN   PRECOAT

VALVE 4

OFF

ON

VALVE 2

DO NOT ALLOW UNIT TO OPERATE FOR MORE THAN TWO MINUTES WITHOUT WATER FLOWING EITHER FROM THE SAMPLING HOSE OR FROM THE WASTE OUTLET VALVE #2

155

AFTER OPERATION CHECKS AND SERVICES

DISASSEMBLY
&
STORAGE

QUESTIONS?

10 MINUNTE

BREAK

9 MIN

8 MIN

7 MIN

6 MIN

5 MIN

4 MIN

3 MIN

2 MIN

1 MIN

STAND-BY

170

PRACTICAL APPLICATION
CAMP SWEAT

PRECOAT

CYCLE

VALVE 1-WASTE
VALVE 2-ON
VALVE 3-FILTER
VALVE 4-PRECOAT
VALVE 5-CLOSED
VALVE 6-CLOSED

FILTER

CYCLE

VALVE 1-CLEAN WATER
VALVE 2-ON
VALVE 3-FILTER
VALVE 4-FILTER
VALVE 5-CLOSED
VALVE 6-CLOSED

BACKWASH VALVE POSITIONS

A

- VALVE 1-WASTE
- VALVE 2-OFF
- VALVE 3-BACKWASH
- VALVE 4-FILTER
- VALVE 5-OPEN
- VALVE 6-CLOSED

B

- VALVE 1-WASTE
- VALVE 2-OFF
- VALVE 3-FILTER
- VALVE 4-FILTER
- VALVE 5-OPEN
- VALVE 6-CLOSED

FILTERING

SHORT SHUT DOWN

LONG SHUT DOWN